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Docket No. GEN-T111XC3D2
Serial No. 09/901,484Remarks

Claims 50-53 and 56-66 are pending in the subject application. Applicants gratefully acknowledge the Examiner's withdrawal of the rejection under 35 U.S.C. § 112, first paragraph. By this Amendment, Applicants have amended claims 50-53, 59, 60, 63, and 64, canceled claims 61, 62, 65, and 66 and added new claims 67-84. Support for the amendments and new claims can be found throughout the subject specification and in the claims as originally filed. Entry and consideration of the amendments presented herein is respectfully requested. Accordingly, claims 50-53, 56-60, 63, 64, and 67-84 are currently before the Examiner. Favorable consideration of the pending claims is respectfully requested.

As an initial matter, Applicants gratefully acknowledge the Examiner's indication that claim 60 is objected to but would be allowable if rewritten into independent form to include the limitations of any base and intervening claims.

Claims 50, 59, and 61-66 are rejected under 35 U.S.C. § 102(b) as being anticipated by Weier *et al.* (1991) as evidenced by Genbank Accession No. AC100813. The Office Action indicates that the Weier *et al.* reference teaches an isolated human chromosome 8. In addition, the Office Action indicates that Genbank Accession No. AC100813 has a 99.8% alignment with nucleotides 3899-4996 and represents a sequence within chromosome 8. Applicants respectfully assert that the cited references do not anticipate the claimed invention as the cited reference fails to teach a contiguous span of at least 1000 consecutive nucleotides of SEQ ID NO: 179 or a span of nucleotides that spans the positions recited within subsections c) or e) of currently pending claim 50. As the Office Action indicates, the sequence cited as prior art is identical over a span of about 600 nucleotides, however, there are at least two mismatched nucleotides within the sequence alignment. Accordingly, it is respectfully submitted that the reference cannot anticipate a contiguous span of at least 1000 consecutive nucleotides of SEQ ID NO: 179. Applicants further submit that the cited reference does not anticipate newly added claims 67-70 as the cited reference fails to teach a contiguous span that comprises at least 1 of the recited nucleotide positions (claims 67-69) or a contiguous span comprising the recited nucleotide positions (claims 67 and 70).

As discussed in the previous response, the fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic

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(*In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993)) and to establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient. *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999). Finally, in relying upon the theory of inherency, the Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990). Applicants respectfully submit that the evidence provided in the Office Action of March 2, 2005 is insufficient to anticipate the claimed invention. As noted in the sequence alignment, there are at least two nucleotides that differ between the cited prior art sequence and the sequence recited within the claims and no evidence is of record that establishes that the nucleotides upstream or downstream of the cited prior art sequence are identical to that recited within the claims. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 102(b) is respectfully requested.

Claims 50-52, 56-59, and 61-66 are rejected under 35 U.S.C. § 102(a) and (b) as anticipated by Osoegawa *et al.* (1998) as evidenced by Genbank Accession No. AC022578 and an email from Pieter de Jong. The Office Action states that the Osoegawa *et al.* reference teaches synthesis of BAC chromosome libraries and teaches the synthesis of a particular BAC library termed RPCI-11. The Office Action also states that the email of Pieter de Jong indicates that filters from the RPCI-11 library were first publicly available, used and sold on August 1, 1997. Applicants respectfully assert that the cited references do not anticipate the claimed invention as the cited prior art fails to teach a contiguous span of at least 1000 consecutive nucleotides of SEQ ID NO: 179 and the cited prior art fails to teach the recited contiguous spans of nucleic acid sequences. Applicants further submit that the cited references do not anticipate newly added claims 67-70 as the cited references fail to teach a contiguous span that comprises at least 1 of the recited nucleotide positions (claims 67-69) or a contiguous span comprising the recited nucleotide positions (claims 67 and 70) and that the doctrine of inherency cannot be relied upon for rejection of the currently presented claims as there is no

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evidence of record that establishes that the cited prior art sequences would be identical to those spans recited within the currently pending claims. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 102(a) and (b) is respectfully requested.

Claim 53 is rejected under 35 U.S.C. § 103(a) as obvious over Osoegawa *et al.* (1998) in view of Capecchi *et al.* (1989). The Office Action states that the Osoegawa *et al.* reference teaches vectors that comprise sequences of interest. The Office Action also states that the Capecchi *et al.* reference teaches the use of homologous recombination to form host cells and mammals. Applicants respectfully assert that the cited references do not anticipate the claimed invention. As noted *supra*, Osoegawa *et al.* fail to teach spans of consecutive nucleic acids that meet the limitations of the claims. Further, Capecchi *et al.* fail to remedy the defects noted in the teachings of Osoegawa *et al.* Accordingly, it is respectfully submitted that a *prima facie* case of obviousness has not been established for the claimed invention and reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) is respectfully requested.

It should be understood that the amendments presented herein have been made solely to expedite prosecution of the subject application to completion and should not be construed as an indication of Applicants' agreement with or acquiescence in the Examiner's position. Applicants expressly reserve the right to pursue the invention(s) disclosed in the subject application, including any subject matter canceled or not pursued during prosecution of the subject application, in a related application.

In view of the foregoing remarks and amendments to the claims, Applicants believe that the currently pending claims are in condition for allowance, and such action is respectfully requested.

The Commissioner is hereby authorized to charge any fees under 37 C.F.R. §§1.16 or 1.17 as required by this paper to Deposit Account No. 19-0065.

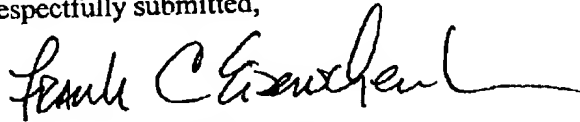
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Applicants invite the Examiner to call the undersigned if clarification is needed on any of this response, or if the Examiner believes a telephonic interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,



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